

LOOK INSIDE FOR DETAILS:

- The RARS
 General Meeting is the 1st
 Tuesday of each
 month.
- The RARS net meets every night @ 8 pm on 146.64.
- The RARS
 Technical and
 Trader's net is
 Saturdays @
 8:30 pm or
 following the
 RARS net.
- RARS meets for a monthly dinner on the 2nd Tuesday of each month.

IN THIS

About RARS 2

Call for 3
Articles

6-Meter Magic

RARS Minutes | 10

Amateur Radio | 4 Nets

The Raleigh Amateur Radio Society's

EXCITER

July 2006 Issue No. 424

The RARS News Hour Owner's Manual

Article by Mike Murphy WA4BPJ

The RARS News Hour is about 45 minutes of audio news, transmitted through the Raleigh Amateur Radio Societies 146.64 MHz repeater every Sunday evening immediately after the 8 PM net. Assembling the source material and presenting the news hour is easy and in this article I'll explain how I do it. If you are interested in pre-

senting the news hour yourself, I'd encourage you to try it. I'd be happy to answer your questions and provide any guidance you need.

News hour material comes from the American Radio Relay League www.arrl.org/ arrlletter/audio/ and Amateur Radio Newsline http:// www.arnewsline.org/.

Both organizations publish their news as MP3 audio files to their respective websites every Friday afternoon. In a nutshell, presenting the news hours is simply playing MP3 audio files stored on your computer through your transmitter to the repeater. At intervals not longer than 10 minutes, you'll pause the file playback, identify your station and give others a chance to use the repeater. I'll talk more about the presentation in a moment, but

(Continued on pages 6-9)

Let's Make RARS Run!

Please help us continue to provide quality programs, activities, and events for our club members. One of the ways we do this is through the RARS annual dues.

The membership year is July I-June 30. Renewal notices will be mailed in the next few weeks, so be on the lookout for yours in the mail.

There are a number of ways to pay your dues.

- Pay at the RARS meetings
- Mail your dues to Greg Seamster KE4PAX RARS Treasurer 1405 Leanne Court Raleigh, NC 27606
- Pay online at www.rars.org/ joinrars.htm. Simply go to the RARS homepage and select Join/Renew membership

Members can also pay their dues for multiple years.

Dues	
Regular	\$18
Senior	\$12
Associate	\$9
Family Members	\$5

We couldn't do it without you!

RARS Officers

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The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the Amateur Radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing radio communications in

times of disaster, emergency, or civic need; to educate members in radio technique; and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Due for regular licensed amateurs are \$18 per year (from July I through June 30). Additional immediate family members pay \$5 each per year. Dues for licensed ama-

teurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year.

Applications for membership may be obtained from the treasurer or the RARS web site (RARS.org).



The Exciter

The Exciter is the monthly newsletter of the Raleigh Amateur Radio Society and is available in both print and electronic formats. Club members receive the printed version in the mail prior to each club meeting. The PDF (electronic) version is posted on the RARS

website at www.rars.org. Members can also choose to have the PDF version emailed directly to them by contacting the treasurer.

The Exciter welcomes articles, advertising, and other contributions. To submit a piece to the newsletter, please contact the Editor.

The views expressed in the Exciter are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

Editor:
Courtney Enzor
KI4HOS
courtney_enzor@
yahoo.com

Call for Articles

It seems like everyone has their favorite aspect of amateur radio. From contests to antenna building, there's something for everyone in this great hobby.

Why not share your interests, expertise, and experience with RARS in the *Exciter*! We welcome member (and non-member/affiliate) submissions. You could write up a quick column on QSL cards or a longer how-to piece on setting up a new shack. Both technical and non-technical articles are

RARS General Meeting

Date: First Tuesday of each month

Location: Forest Hills Baptist Church 201 Dixie Trail Raleigh, NC 27607

Time: People begin arriving at 7 pm .

The meeting officially starts at 7:30 pm.

**Please note that the July meeting has been cancelled.

needed for the Exciter. And don't feel pressured to write a tome - articles of all sizes are appreciated!

To submit an article, simply email your piece to the Editor at courtney_enzor@yahoo.com. Please also feel free to attach pictures to accompany your article. It is helpful if you add captions and identify the people in photographs.

We look forward to learning from each other and broadening our club's knowledge base! So break out those pens, pencils, keyboards, or whatever else you need and get writing!

VE Testing

The RARS VEs will accept walk-in testing at the February, May, August, and November RARS meetings; the RARSfest in April; the Cary Swapfest in July; the JARSfest in November; and folloing RARS license classes.

Please bring a photo ID, your current license, a copy of your current license, and any CSCEs you have for credit. Visit www.rars.org for more information.

RARS Monthly Dinner

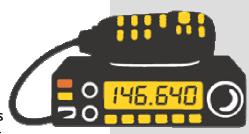
Join us on the 2nd Tuesday of each month for the RARS dinner. It's open to everyone: RARS members, non-members, friends, and family feel free to bring your little ones!

Golden Corral @ 6129 Glenwood Avenue in Raleigh. Dinner begins at 6:30 pm.

RARS Repeaters in Raleigh

145.13 (82.5 PL) 146.64 444.525 (82.5 PL)

Join us for the nightly RARS net @ 8 pm on the 146.64. All hams holding a Technician class license or higher are invited to check-in. We welcome both RARS and non-RARS members to the net.



Visit the RARS website for up-to-minute announcements, current information, and special features at www.rars.org.

6-Meter Magic

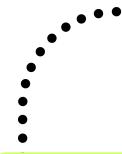
Article by Joe Squashic W4TTO

What's so magical about 6 meters? Well, to begin with, it doesn't take much to work 6 meters. Case in point; working with a modest little set up, I am able to work stations all over the country and out of the country as well. Although we are in the bottom end of the current solar cycle, the band comes alive from time to time. And when it does, WOW, the magic kicks in. My modest little 6-meter set up consists of an ICOM 706 MK2G feeding a small M2 6-meter, horizontally polarized loop antenna. The antenna sits on a mast just below the 2M/440 vertical and is about 25 ft. up. Over the Memorial Day weekend for example, there were several good band openings that gave me the opportunity to make contacts

to several states in the mid-west as well as Canada. In about a two-hour time frame, I was able to log several stations in Minnesota. Iowa, Kansas, Louisiana, Oklahoma, Texas, Florida, and Tennessee. I even logged a station in Prince Edward Island. Amazingly, I even heard a station in Florida running a HT using only 2 watts and was making several out of state contacts. So, when the band is open, almost any radio configuration will bag you some far away contacts.

This is especially important for some of our newer Hams to be aware of. In addition to repeater hopping on 2m/70cm, a small little 6-meter capable base set-up will allow them to "really get out there" and have some real fun.

Sure, my little loop antenna and modest 100 watts has difficulty sometimes getting through pile ups and heavy QRN as well as going up against some stations that run 500 or more watts with large beam antennas 100 ft. in the air. I have found that patience and perseverance will eventually pay off. Doing a great deal of listening and using good operator practices is the best advice I can give newer hams interested in working the "Magic Band." It's fairly easy and can be financially affordable to go far beyond repeater range. A used rig and a simple antenna will usually do the trick. I can't wait until the next solar cycle takes off. Six meters should really come alive.



Welcome New RARS Members!

Chris KI4PBQ Ken KI4PFG Ric Wright KI4PVC



Hamfest Calendar

July 8	Salisbury, North Carolina
July 15	Cary, North Carolina
July 29	Waynesville, North Carolina
August 5	Roanoke,Virginia
August 12	Fayetteville, North Carolina

August 13 Lexington, Kentucky
September 2-3 Shelby, North Carolina

Dates courtesy of the SERA Repeater Journal.

May 2006 RARS Net Reports

RARS Two Meter Traffic/Ragchew Net

Check-ins: 434 Traffic: 33/28 Minutes: 784 Sessions: 31

Special Interest Nets

Check-ins: 73 Minutes: 428 Sessions: 9

July Birthdays

James	KE4DRN	7/3
Chip	WB4ZVR	7/4
Bill	N9JLP	7/6
Cathy	KA3QPU	7/9
John	WD4FBG	7/10
Mark	KI4AIW	7/11
Annette	KD4AQH	7/11
Jeff	KE4MEQ	7/13
Debbie	WD8EBI	7/13
Doug	AD4UL	7/14
Giff	KC4SAM	7/15
Joe	K3SPC	7/15
Al	AE4QV	7/16
Bob	K4RLC	7/19
Lee	WB4DRJ	7/25
Ferdinand	AD4RC	7/25
Charles	WB4DCM	7/26
Glenn	KS4VA	7/27
Meme	KE4NGM	7/28
Mark	KE4IZP	7/28
William	K4CIA	7/28
Don	N4TH	7/29
Dave	W4YDY	7/29
John	KG4HDT	7/3 I

(Continued from page I) first let's look at the necessary hardware.

The Hardware

To send acceptable audio, you will need a direct connection between your computer and your transmitter. Avoid the temptation to use your rig's microphone to pick up the sound from your computer's speakers. The audio quality will suffer and every stray noise in the room will be transmitted. You also don't want to hold the push-to-talk (PTT) button for 45 minutes! So you're going to need a simple interface to make the audio connection, give you control of the PTT function and provide a way to identify your station. You'll also need a way to monitor your transmission. This might be headphones or a set of amplified speakers connected to your computer or a second radio listening to the repeater.

There are several considerations for your choice of radio. Most important is that it be able to transmit continuously for at least 45 minutes without overheating. Most ham gear is not designed to transmit continuously at maximum power. For typical hand held rigs this means operating at I watt or less. For 50 watt mobile rigs, 5 watts should not be a problem and ten watts may be feasible with an external helper fan blowing on the heat sink. Make sure you can still maintain a quality signal through the repeater at the reduced power level. Another consideration is that your rig's power supply must also be able to deliver the transmit current continuously. With an HT, consider whether your battery pack will support 45 minutes of continuous transmission. If you have any doubts, use an external power supply that can deliver at least the transmit current stated in your owners manual for the power level you'll be using. Don't use the small wall wart battery charger that came with your rig. These are generally only able to supply a small charging current for the battery and won't support the transmitter. Attempting to transmit will produce mostly buzz and hum. The final consideration is the method of interfacing to the computer and radio. Your interface must provide a direct audio connection between your computer and radio and a way to control the PTT operation. It may also provide a means to switch your radio's audio input between the computer and a microphone so you can identify your station. Let's look at each requirement.

Identifying your station can be as trivial as using a second radio. When it's time to id, pause the computer, un-key your transmitter and use the second radio to identify your station and communicate with anyone that wants to use the repeater. This is the method I use. A second radio is also convenient to monitor the presentation through the repeater. If you do monitor the repeater, the monitor antenna will likely need to be 15 to 20 feet from the presentation radio antenna. At the monitor receiver, your presentation signal is many times stronger than the repeater and even though they are on different frequencies, the local presentation signal will reduce the sensitivity of the monitor receiver enough that it may not hear the weaker repeater. This affect is called desensing and to overcome it, you have to reduce the strength of the overloading signal at the receiver. Assuming you're already transmitting with the lowest power required for good repeater signal quality, the only remedy is to increase the separation between the antennas.

I Have But One Rig

If a second rig isn't an option, you'll have to id using a microphone connected to the presentation radio. With an HT this is as simple as unplugging the interface from the radio and using the built in mic. With a mobile rig you'll have to unplug the interface and re-connect the rig's own external mic. Another mobile rig option is to enhance the interface with a switch and connector for the external mic, using the switch to transfer the rig's audio input between the computer and external mic. Also, with a single radio, you'll need a way to hear what you're sending. You can monitor the audio from your computer by using a "Y" adapter cable to connect both the interface and headphones or amplified speakers to the computer headphone jack. If you use an indoor antenna with your presentation radio and are using amplified computer speakers, rf from your transmission may produce distorted audio. The solution is just like for desense; use the minimum power necessary for a quality repeater signal and put as much distance as possible between the speaker wiring and antenna. Speakers are convenient because you can adjust the monitor volume independently of the

transmitted audio but their built in amplifiers make them susceptible to rf interference.

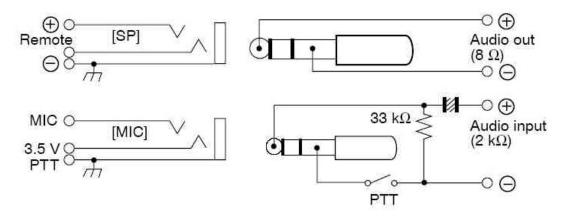
The interface's second function is control of the PTT operation. For most radios, the transmitter is put on the air by grounding the PTT line. In the simplest arrangement, the PTT line is permanently grounded in the interface so that the rig switches to transmit just by plugging in the interface and switches back to receive when the interface is unplugged. With a single radio, this is a practical solution since you need to unplug the interface to temporarily connect a microphone to identify. If you use a second radio for identification, adding a PTT control switch to the interface may be more convenient because you can leave the interface permanently connected. This is the configuration I use.

The final job of your interface is to make the audio connection between your computer and rig. There are a couple of concerns. The first is that some radios present a DC voltage at the microphone input and if not blocked, it might cause damage to the computer. The second concern is that generally the audio signal from the computer is at a much higher level than the signal from a microphone and will need attenuation to prevent distortion caused by over driving the transmitter. The computer's volume settings may provide enough control to avoid overdriving but if not, you'll have to provide additional attenuation in the interface. The details of these solutions will depend on the characteristics of your particular radio. I'll explain my W32A interface but you will need to look at your own rig's requirements to properly design your interface. Your radio's owners manual is the first place to look for microphone and PTT connection information. You can download manuals from the following links:

Kenwood	http://members.fortunecity.com/xelbef/kenwood-manuals.htm
Icom	http://www.icom.co.jp/world/support/download/manual.html
Yaesu (click on "Products")	http://www.yaesu.com/
Alinco	http://www.alinco.com/pdf.files/

For the RARS News Hour, I use a laptop computer interfaced to an Icom W32A hand held, set to I watt, connected to an indoor mag mount style mobile antenna. When I first started presenting the news hour, I identified my station using a second 2 meter rig and used a switch on my interface to control the W32A's PTT. Eventually I started using a simple computer audio editing program to produce a single file for transmission. This single file contains both news files and my station identifications inserted at the right times. With this one MP3 file, all I have to do is pause it and flip the interface switch to un-key the W32A to give others a chance to use the repeater. I never use the second rig unless I need to speak with someone who has asked for the repeater.

Figure 1: Icom W32A External Connections (from the W32A owners manual)



Make the Connection

Figure I is taken from the W32A owners manual. It shows how connections are made to an external mic and PTT switch and an external speaker. We're interested in where to connect the computer audio and how the PTT connections are made. Notice the capacitor next to the "+" terminal of the audio input plug. This is a clue that DC is present across the microphone connector, so an interface to this radio will need a similar capacitor. The other clue that DC is present is the PTT connection. When the PTT switch closes, the 33 K ohm resistor is connected across the audio lines. This causes the rig to switch to transmit by conducting a small DC current through the resistor. The radio senses this current and switches from receive to transmit. The audio from the computer is connected between the "+" and "-" input terminals. The 33 K ohm resistor is a much higher impedance than the microphone so has a negligible affect on the audio. The 3.5 volts is a separate source of DC for powering any electronics in the external mic like DTMF circuitry or a backlight and the interface will not connect to it.

Figure 2: My Interface Schematic

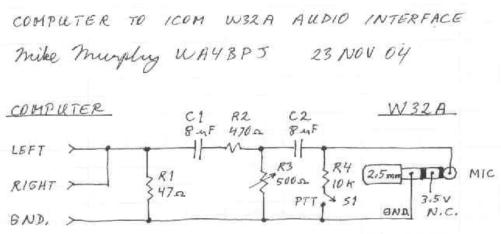
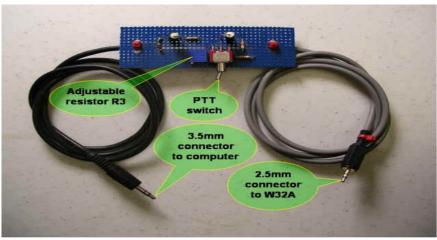


Figure 2 is a schematic diagram of my interface. The terminals on the left represent the connection to the computer audio (the jack you would plug your computer speakers into). It's a standard 3.5mm or 1/8" stereo audio plug. I got mine by purchasing a patch cable of several feet and cutting it in half. On the right is the 2.5 mm plug that connects to the rig's mic connector. Since this was my first attempt at interfacing between the computer and rig, I took a conservative approach. I wanted the interface to present the same conditions to the computer as an ordinary set of headphones. I began by connecting the left and right computer audio channels together and RI between them and ground. RI provides a load to the computer similar to a set of headphones and its value can be anywhere from 10 to 100 ohms. CI is included just to block any DC that may be present at the computer output. It's unlikely but If DC was present it could gradually degrade the adjustable resistor R3, which could eventually lead to noise on the audio. R2 and R3 serve as an adjustable attenuator. I wasn't sure of the audio levels I needed or if I would have enough control range through the computer volume setting so I included R2 and R3 to provide additional attenuation. After experimenting with various settings, I found that I was operating with R3 near its maximum value which translates to about 6db of attenuation, a level easily achieved from the computer volume control, so that at least for my radio, R2 and R3 aren't necessary. C2 blocks the DC present at the microphone input of the W32A. The rig's PTT operates by drawing a small DC current from the microphone connection. This is the function of S1 and R4.

The interface I use may seem complicated but it could probably be reduced to just C2, R4 and S1. You could also

leave out S1 by just connecting R4 to ground. This will switch the rig to transmit just by plugging in the interface. Figure 3 shows my interface.

Figure 3: My Interface Board



Say What?

Each weekend I prepare for the Sunday presentation by downloading the MP3 files from the ARRL and Amateur Radio Newsline and preview them to find the id times. The ARRL audio lasts about 15 minutes and has 3 second pauses between the major segments and a longer 5 second pause about midway through the file. This is the time for the first id. Amateur Radio Newsline has two id breaks identified with tones. During the preview, I note the id times and then during the presentation watch the running time of the files to know when an id time is approaching. When I first started presenting the news hour I paused each file (be sure to click pause, not stop since stop rewinds the file!) and identified using the second radio. Later, when I began using a simple audio editor to produce a single news hour file I included my station identifications in the file so after the id, I just paused the file and flipped the interface PTT switch to give others a chance to use the repeater. Any software like Windows Media Player, Real Player or Quick Time that can play MP3 audio is suitable for presenting the news hour. You can use the simple script example at http://www.wa4bpj.com/Ham_Radio/RARS/RARS_News_Hour/RNH_script_text.htm.

as a guide for your station id. There's no formality or strict requirements except to identify your station at least every 10 minutes. During the news hour, the repeater takes care of identifying itself so strictly speaking, you don't even have to let the repeater drop. It's just good practice in case someone needs to use it during the news hour.

Finally, the repeater normally times out after 3 minutes of continuous transmission. When I volunteered to present the news hour, I was given a timeout extension code to send to the repeater before starting the news hour. If you are genuinely interested in presenting the news hour, contact me and I will point you to the right person to obtain this information. You can reach me at wa4bpj@nc.rr.com.

Now that you've had a peek behind the curtains, perhaps you'd like to help host the news hour. I believe it's a good plan to have several capable stations to share the fun and provide mutual back up. Let me know if you'd like to help keep the news coming.

You can find this article on my website at http://www.wa4bpj.com/Ham_Radio/RARS/RARS_News_Hour/RARS_News_Hour.htm.

Minutes of the RARS Board of Directors Meeting for May 2006

The Board of Directors meeting of the Raleigh Amateur Radio Society was conducted on May 16, 2006 at the Forest Hills Baptist Church located on Dixie Trail.

Attendance: Board –Dick Bitner W8HYD, Hank Montgomery K4HM, Selene Montgomery KG4RMT, Chuck Littlewood K4HF, Gary Pearce KN4AQ, Greg Seamster KE4PAX, Steve Worley KB4HDQ, Virginia Enzor NC4VA, Courtney Enzor KI4HOS, Andy Peterson NI4S and Dick Orander KD4ISC. Others – Charlie Swindell WB4DCM.

President Dick Bitner W8HYD, called the meeting to order at 7:30 pm.

On a motion from Hank K4HM and second by Selene KG4RMT, the April 2006 Board meeting minutes were approved as corrected.

Selene KG4RMT provided the Vice President's report.

The June program will be the Intermediate Skywarn Spotter's class.

Committee Reports

Education – Virginia NC4VA advised the weekend Technician class at Cisco was going well. There are 22 students enrolled. The VE session will be held on June 3.

Exciter – Courtney KI4HOS reported the May Exciter is available and should be in the mail. She is interested in feedback on the new layout and content of the newsletter. Courtney's new email address for Exciter submissions / comments is: Courtney_enzor@yahoo.com.

Greg KE4PAX provided the Treasurer's report. There are 289 RARS members. The budget will be discussed later in the meeting and will be presented to the general membership at the June meeting for approval. A financial review needs to be conducted between now and the June Board meeting.

Public Information - Gary KN4AQ reported that Skywarn was mentioned and heard on the WRAL TV severe weather report coverage last Sunday.

Webmaster – Steve KB4HDQ advised the club's webpage had been updated with plans for this year's Field Day activities. He also asked for the group's thoughts on providing advertisements on our site. This idea has been discussed before and the general thought has been to leave our webpage commercial free. Additional thought may be given to provide advertisement space to vendors who visit our hamfest. The rules of our hosting site will need to be explored before pursuing this idea any further.

Hamfest – Hank K4HM reminded everyone that the hamfest workers' party will be held on June 17 at Harris Lake Park. The leftover J-pole building materials from the hamfest have been given to Dick KD4ISC and will be used for an antenna building party in the near future.

Public Service – Dick KD4ISC advised that Bill Cole KG4CXY, and the Carolina Helping Hams will be coordinating radio operators for the Summer Special Olympics on June 2, 3 and 4. RARS has been asked to provide communications support for the July 4th Firecracker Bike event which will benefit the MS Society. Dick will begin recruiting a coordinator and volunteers for this event.

ARRL Liaison – Chuck K4HF reported the FCC has placed clarification for communication rules in the Federal Registry. There have been no updates on proposed Morse code requirement changes.

Unfinished Business

The search continues for a public service coordinator. A committee approach for handling this job may be needed.

There is still an open At-Large Board position. Dick W8HYD would like to recommend Rod Thomson KI4LSN to fill this position. Discussion followed about membership qualifications required for such a position. No further action was taken.

New Business

The Board reviewed the proposed budget for 2006 - 2007. After discussion and comments, Gary KN4AQ made a motion to present the proposed budget to the membership for approval at the June general meeting. A second was provided by Chuck K4HF. The vote carried in favor of the motion.

General Comments

Gary KN4AQ suggested that some meeting time be set aside for new ham or member questions and answers.

Chuck K4HF reported the LDS church has asked to use the 145.13 repeater to use for shelter communications during an emergency. Dick W8HYD will talk with Virginia NC4VA and Henry Heller WB2AGA of CERT to work out the details of sharing this frequency.

Meeting adjourned at 9:35 pm.

Submitted by Dick Orander, KD4ISC, Secretary

Minutes of the RARS General Meeting for June 2006

The general meeting of the Raleigh Amateur Radio Society was conducted on June 6, 2006 at the Forest Hills Baptist Church located on Dixie Trail.

President Dick Bitner, W8HYD, called the meeting to order at 7:35 pm.

The following visitors were recognized and welcomed to the meeting: David Love N4UBH, Dave Walker KD4THS, Robert Pierpoint KG4BDX, Sara Pierpoint KI4JWZ, Cindy Love KI4OKO, Lee Taylor, William Burns and Ric Wright.

Dick Orander KD4ISC provided a public service update. Hams are needed for the July 4th Firecracker 100K bike ride. This event begins and ends in Cary and is a fun one to support. Contact Dick KD4ISC (kd4isc@arrl.net) to coordinate or volunteer for this public service opportunity. Tuesday, June 20, is the ARRL coordinated "Take Your HT To Work" Day. Everyone is encouraged to participate.

Dick W8HYD advised that radio operators are also needed to assist with the Tour de Cure bike event on June 24 and 25. Riders will begin in Cary and ride to Kerr Lake on Saturday and make the return trip on Sunday. Contact Bill Cole at kg4cxy@hampublicservice.org for more information or to volunteer.

Virginia Enzor NC4VA reported the weekend Technician class sponsored by RARS and the Cisco Amateur Radio Club has just ended. There were 23 students in this class. So far, 15 students have tested and are new Techs. She then reported that there are plenty of Skywarn programs planned for the month of June. On Saturday, June 17, Skywarn will participate in the Hurricane Preparedness Expo at the Triangle Town Center. A special event station will run during this events and a QSL will be offered to anyone making contact with the station. Tonight's meeting program will be a Spotter refresher class. A certificate will be available to those who sign the Skywarn training roster.

Hank Montgomery K4HM reminded members of the Hamfest Workers' party that will be held on Saturday, June 17, at Harris Lake Park. Those interested in attending need to RSVP to him as soon as possible.

Rod Thomson KI4LSN advised he was coordinating the Get On The Air (GOTA) station at the RARS Field Day site. Steve Ferrarini KJ4BX is assisting him. New hams or those with little operating experience are encouraged to operate the GOTA station. Experienced hams are also needed as coaches for this station. Contact Rod or Steve if you are interested in working with them.

Dick W8HYD announced there was a magazine article located on the back table which features RARS members Israel Pattison N4ZVU and Camille Durfee KI4CED.

Greg Seamster KE4PAX provided the Treasurer's report. There are 290 RARS members.

Neal Fisher N4HAF updated the group on Field Day preparations. RARS will be at the Carroll farm location again this year. Setup will begin on Friday, June 23 at 2 pm. The event itself begins at 2 pm on Saturday, June 24 and continues through Sunday, June 25. All are invited to participate.

Dick W8HYD advised that the club's operating budget is ready for review. He reported that the club is looking for ways to increase membership, save money with the hamfest and generally tighten the budget. Greg KE4PAX distributed copies of this year's proposal and provided a brief review. Dick recommended that this budget be accepted by the group. Charlie Swindell WB4DCM made a motion to approve the budget as presented. Rod Thomson KI4LSN provided a second and the vote carried in favor of the motion. Members were reminded to contact their Board members with ideas or concerns and input about the budget.

Alan Pittegoff AB4OZ will conduct the RARS 10 meter net tomorrow night on 28.364 MHz following the 8 pm 2 meter net.

The floor was given to Darin Figurskey KC2IPY of the National Weather Service. He provided the evening program on Skywarn Intermediate Spotter Training.

Chuck Littlewood K4HF advised the group there are books on the back table for sale from an estate. He also announced the local Quarter Century Wireless Association will hold a luncheon on June 17. Contact him for more details.

Door Prizes were won by Charlie WB4DCM and Kurt KI4NQX.

Attendance - 59

Meeting adjourned at 9:01 pm.

Dick Orander, KD4ISC RARS Secretary

Amateur Radio Nets



The RARS Technical & Trader's net is held on Saturday evenings on the 146.64 after the 8 pm RARS net.

If you would like your net information included in the Exciter. please contact the Editor.

Central Carolina SKYWARN

Please join us each Tuesday at 9:15 pm on the 146.88 repeater for the CCS net. On each net there are announcements, check-ins by county, and often a program or training spot.

Upcoming CCS Information nets include:

May 16 — "Challenges of Hail Prediction in North Carolina" with Brandon Vincent, General Forecaster with the Raleigh NWS. A PowerPoint will be available; please check out website for availability.

May 23 — National Hurricane Awareness Week. Program and speaker TBA.

Check us out at www.ccskywarn.net.

The VOIP Hurricane net is held Saturdays @ 7 pm on the 440 Carolina linking system. To view the list of linked repeaters, go to www.carolina440.net/repeaters_on_link.htm.

The NC VOIP for North Carolina net is also held on the 440 Carolina linking system on Sundays @ 7 pm.







Join the Tarheel Short Wave Listening (SWL) Special Interest Group (SIG) net on Monday evenings @ 9 pm on 146.64. We discuss all areas of radio monitoring and welcome your logs! We also have a SWL/SIG meeting on the third Monday of the month in addition to our Please join us on the Carolina 440 net every Monday night at 7:30 pm. This ragchew net utilizes II linked repeaters, spanning piedmont and eastern North Carolina. The net will also be connected to the Reflector 921 Channel I so other IRLP links can join in on the net.

These are the present frequencies and locations that you can use to access the net:

441.725+ (tone of 100.) Raleigh "Backbone Hub" repeater

442.075+ (tone of 88.5) Leland 444.150+ (tone of 100.) Clayton

444.375+ (tone of 100.) Henderson

444.775+ (tone of 100.) Cary

444.875+ (tone of 100.) Wendell

443.075+ (tone of 100.) Clinton

444.325+ (tone of 100.) Holly Springs

444.550+ (tone of 100.) Coats

444.775+ (tone of 88.5) Castle Hayne

444.925+ (tone of 100.) Durham



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No RARS Meeting for the Month of July



Due to the national holiday, please note that there will not be a RARS General meeting on the 1st Tuesday of the month (July 4th). The RARS dinner will still be held, as will the nets.

The next RARS General meeting will be August 1st at the Forest Hills Baptist Church.